# **Grizzly or Brown Bear**

**Ursus arctos** 

Mammalia — Carnivora — Ursidae

# **CONSERVATION STATUS / CLASSIFICATION**

Rangewide: Apparently secure (G4) Statewide: Critically imperiled (S1)

ESA: Threatened

USFS: Region 1: No status; Region 4: Threatened

BLM: Threatened, Endangered, Proposed, and Candidate (Type 1)

IDFG: Threatened

#### **BASIS FOR INCLUSION**

Threatened under the U.S. Endangered Species Act.

#### **TAXONOMY**

Until recently, 2 subspecies of the brown bear were recognized in North America, and the subspecies *U. arctos horribilis* was considered to occur in Idaho. Recent molecular evidence, however, supports the conclusion that North American populations represent a single subspecies, *U. arctos arctos*.

#### **DISTRIBUTION AND ABUNDANCE**

The brown bear currently occurs in western Canada, Alaska, extreme northern Washington, Idaho, Montana, and Wyoming. Within Idaho, there are 2 distinct populations, 1 in the north and another in the southeast. The northern population occurs in the Selkirk and Cabinet Mountains and extended into southern British Columbia. However, this population may have been separated from the British Columbia population for at least a short time. This population is expanding south of the Clark Fork River.

The population in southeastern Idaho is centered in the greater Yellowstone Ecosystem. Within Idaho, individuals occur in the Centennial and Henry's Mountains, and forested lands west and south of Yellowstone National Park. The Yellowstone Ecosystem population has been estimated to comprise 431-676 bears. Over 90% of these occupy territories in Wyoming or Montana.

#### POPULATION TREND

The population in northern Idaho is slowly increasing by an estimated 1.5% per year. The Yellowstone Ecosystem population is increasing by an estimated 4-7% annually.

#### **HABITAT AND ECOLOGY**

This species occurs in a variety of habitats. Individuals overwinter in dens that are typically excavated dens at higher elevations. After emergence from dens in late April or May individuals seek areas with green forage, such as emergent vegetation, corms, and bulbs. Habitat used during this time of year includes low-elevation meadows,

riparian areas, and south-facing avalanche chutes. In some areas, ungulate carrion is an important food during spring. Throughout late spring and early summer individuals follow plant availability to higher elevations. During summer berries and nuts are important food sources. In northern Idaho, huckleberries are the primary summer and fall forage. In southeastern Idaho, white-bark pine nuts are an important food.

### **ISSUES**

Threats to populations include human persecution, habitat alteration, human-caused displacement, and long-term genetic implications of inbreeding. The causes of natural mortality are not well known, but diseases and parasites do not appear to significantly affect populations. Human-caused mortality may result from mistaken identity by black bear hunters, intentional poaching, self defense, and conflicts associated with livestock, food storage, and garbage disposal. Brown bears do not generally tolerate high human density,

The population in southeastern Idaho has been isolated from other brown bear populations for over 100 years. Recent DNA analysis indicates that the population in northern Idaho has been isolated from the population in British Columbia for a short time period. Long-term genetic isolation is expected to lead to lower genetic diversity and a higher risk of extinction.

# **RECOMMENDED ACTIONS**

Necessary conservation actions include limiting road densities on federal land within recovery zones, and limiting displacement and human-caused mortalities. Minimize habituation of bears to humans and human-related foods. In particular, the proper management of sanitary landfills is important for reducing conflicts with humans. Hunter education and bear identification classes have been implemented to reduce mistaken identity mortalities.

Genetic research to address the implications of isolated populations is important to conserving this species. Additionally, the conservation of habitat and important food resources is essential to the maintenance of viable populations and the avoidance of human bear conflicts.

# **Grizzly or Brown Bear Ursus** arctos Ecological Section Predicted Distribution Designated ESA Recovery Zone Occupied Habitat **Point Locations**

Map created on September 26, 2005 and prepared by Idaho Conservation Data Center. Sources: Known distribution is from Idaho Department of Fish and Game (2005). ESA Recovery Zone from Idaho Department of Lands. Predicted distribution is from the Wildlife Habitat Relationships Models (WHR), A Gap Analysis of Idaho: Final Report. Idaho Cooperative Fish and Wildlife Research Unit, Moscow, ID (Scott et al. 2002). Predicted distribution is approximate (for more information, go to http://www.wildlife.uidaho.edu/idgap/idgap\_report.asp).



